# Proposal to the Wisconsin Department of Health Services

# **Oral Health Education Study**

Request for Proposal (RFP)
RFP-BC-001-DHS
Project # 0913D

November 29, 2009

Howard Bailit, DMD, PhD

# I. Table of Contents

- II. Narrative
  - A. Project Summary
  - **B.** Organizational Capacity
  - C. Capacity and Experience of Partners and Key Staff
  - D. Methodology/Approach
- III. Work Plan/Timeline
- IV. Cost Estimate
- V. Required Materials
- VI. Appendices
  - A. Key staff bio-sketches/Resumes
  - **B.** Letters of Endorsement None
  - C. Relevant Materials None

## II. Narrative

# A. Project Summary

Under the direction of Howard Bailit and with an experienced team of researchers and technical staff, the research group will assess the cost-effectiveness of different options for reducing dental access disparities in rural and other underserved areas of Wisconsin. Building on five years of experience consulting with states on new dental schools and with access to an extensive Wisconsin data set developed for a recently completed dental workforce study, the project team will pay special attention to a proposal from the Marshfield Clinic to start a new dental school. Other issues that will receive consideration are the defining the access problem, assessing the demand for dental education by Wisconsin college students, the strategies used by other states to reduce disparities, and the role of different types of Mid-Level-Dental providers. The study will provide the State a detailed assessment of the costs and likely impact of different strategies for increasing access to dental care.

# **B.** Organizational Capacity

Howard Bailit has an extensive record of directing funded research projects. Within the past 10 years he has successfully carried out about \$40 million dollars of research related to dental education and the delivery of dental and medical care to underserved populations. He has built a strong national team of research colleagues and technical support staff to carry out this research. These colleagues include economists, statisticians, social scientists, policy analysts, community dental clinic directors, practicing dentists and physicians, and the leadership of many relevant stakeholder organizations.

His research (over 170 papers) is widely cited in the literature and has had a significant impact on dental education and health policy. He has received national recognition for his research contributions including membership in the Institute of Medicine, the Presidential Award from the American Dental Education Association, membership on the Dental Economics Advisory Group of the American Dental Association, membership on the Delta Dental Plans Scientific Advisory Committee and many other honors.

Of immediate relevance to the Wisconsin RFP, he has had a leading role in assessing the need for dental schools in several states and has assisted in the design of schools that are expected to have a significant impact on reducing access disparities.

<u>East Carolina University</u>, <u>School of Dental Medicine</u> – This school was approved and funded and will enroll its first class in 2011. The school is building dental group practices in underserved, rural areas of the state and will have faculty, residents, and students work as a team providing care to thousands of underserved patients.

<u>University of New England, School of Dental Medicine</u> – After completing an assessment of the feasibility of building a dental school for the northern New England states, he consulted with the University of New England in Portland Maine to design and build a new dental school. The University Board of Trustees has approved the school and funds are now being raised to construct new facilities, including community-based group practices.

Florida Agriculture and Mechanical University – Located in Tallahassee, Florida, this Historically Black state supported University is in the early stages of obtaining state funds for a planning grant. A key objective of the proposed school is to address the access needs of underserved rural populations living in the Panhandle and northern parts of the state and to recruit more underrepresented minority students.

Also, of immediate relevance, Howard Bailit and Tryfon Beazoglou are completing a study of the supply and demand for dental services in the state of Wisconsin over the next 10 years. This project, funded by Delta Dental of Wisconsin, is a follow-up to a previous study of the Wisconsin dental workforce that was completed in 2001. The Wisconsin study team has obtained primary and secondary data on dentists, hygienists, dental practices, the dental safety net system, the Marquette School of Dentistry, the Medicaid system, and private dental insurance. This may be the best state-level dental care system data set available. These data will be used in the proposed project.

# C. Capacity and Experience of Partners and Key Staff

Each of the key members of the research team is described along with his/her expected contribution to the proposed project:

# **Core Staff**

Howard Bailit, DMD, PhD – A dentists and health services researcher, he has spent the last 10 years investigating the economics of dental education and practice with a special emphasis on access disparities. He co-directed the nationally known Pipeline project (Pipeline, Profession and Practice: Community-Based Dental Education) that was funded by the Robert Wood Johnson Foundation and The California Endowment. Some 23 dental schools participated in this project. With a major focus on reducing access disparities, the Pipeline program has had a major impact on increasing the time that senior students and primary care dental residents spend in community clinics providing care to underserved patients, preparing students to treat underserved, Limited English Proficient patients, and recruiting more underrepresented minority students into dentistry. His current research includes studies of the impact of community-based dental education on dental school finances, the financial operation of Federally Qualified Health dental clinics, and the supply and demand for dental services in Wisconsin. He will serve as the project's Principal Investigator.

<u>Judy DeVitto, BS</u> – She is an experienced financial manager both at the institutional and project levels. Prior to her current position, she spent several years in the finance department of the University of Connecticut, School of Dental Medicine. Currently, she is project director for the national study of FQHC dental program finances and the Wisconsin project on the supply and demand for dental services. She takes responsibility for managing the financial aspects of all of Howard Bailit's projects. She will serve as the project's financial manager and administrator.

<u>Taegen McGowan, BA, MPH</u> – A seasoned project director and administrator, she has responsibility for the day-to-day management of several projects, including the Impact of Community-Based Education on Dental School Finances. Ms. McGowan and her staff are also responsible for organizing and running several large national research meetings each year. She will serve as the Project Director.

<u>Veronica Myne-Joslin</u> - She has worked many years in the Information Technology (IT) departments of FQHCs and other health care organizations. She is familiar with private and Medicaid dental claim data and has extensive experience managing large data sets. She directs IT activities for all research projects directed by Tryfon Beazoglou and Howard Bailit. She will serve as the project's data analyst.

#### Consultants

Jack Brown, DDS, PhD – He is dentist and economist and has a 30 year record of research on oral health and the dental care delivery system. He spent most of his career at the National Institute for Dental and Craniofacial Research, studying the economic determinants of oral health and at the American Dental Association, where he headed the survey research division. Currently, he is based at the American Dental Education Association, where he serves as editor of the Journal of Dental Education. He has done seminal research with Drs. Bailit and Beazoglou on the economics of dental education and on the need and demand for dental services. He will assist Drs. Bailit and Beazoglou in estimating the economic feasibility of the proposed dental school and the rural clinics.

Kenneth Tomlinson, BS – He is Chief Financial Officer and Associate Dean for Administration at the University of Florida College of Dentistry; he has served in senior financial management roles at the University for 30 years. He is nationally recognized for his knowledge of dental school finances and has had a prominent role in the American Dental Education Association's organization of dental school finance officers (Chair) and the Commission on Dental Accreditation. He will provide expertise in assessing the financial viability of different models of the proposed dental school.

<u>Sheila Stover, DDS</u> - She is Director for Rural Outreach Programs at Marquette University School of Dentistry. In this role she has organized and manages the network of community clinics where Marquette students and residents provide care to underserved patients. She will provide critical expertise to the project team in assessing the capacity of the rural safety net systems in Wisconsin to reduce access disparities.

<u>David Clemens, DDS</u> – He is a highly respected general dentist in private practice. He spent most of his career in the Public Health Service and has extensive experience with the Indian Health Service and Correction facilities. He will provide the project information on the private, public and voluntary dental sectors in Wisconsin.

To Be Named-Other consultants as needed with special expertise.

# D. Methodology

This section describes the methods that will be used to investigate several key issues: 1) the basic access issue in Wisconsin, 2) strategies used by other states to decrease dental access disparities; 3) the impact of a new dental school at the Marshfield Clinic on access disparities in rural areas; 4) other options for increasing dental graduates and dentists; 5) other non-educational options for decreasing access disparities in rural areas; 6) the potential impact of Mid-Level-Providers (MLPs) on access; 7) opportunities to increase access through greater integration of the delivery of medical and dental services; 8) additional studies needed; and 9) major findings and recommendations.

- Access Problem For a select group of rural counties, we will compare dental care utilization rates for three subgroups of the population: Medicaid/CHIP enrollees, low-income non-Medicaid adults and children, and individuals with private insurance. We will also determine if utilization rates are related to the number of private dental practitioners and safety net providers in the county. This analysis will provide an estimate of the magnitude of the access problem in rural areas of Wisconsin.
- 2. State Access Reduction Strategies We will examine several strategies used by other states to increase access to dental care. These include: Medicaid/CHIP dental fee increases, patient case managers, school-based dental programs, expanded duty dental auxiliaries, dental therapists (a type of Mid-Level-Provider) and new dental schools. We have first-hand knowledge of most of these strategies, having worked on developing/evaluating these strategies in several states.
- 3. <u>Impact of Proposed Marshfield Clinic Dental School</u> We do not have any information on the design of the Marshfield Clinic dental school. We can evaluate the dental school model proposed by the Marshfield Clinic in terms of its impact on access to dental care in rural counties. Alternatively, if the

Marshfield Clinic does not have a specific education model, we can estimate the potential effects of different models.

In general, dental schools can impact access to care in two ways: a) a significant number of graduates of the school set up practices in underserved areas or seek employment in safety net clinics and b) the school's clinical programs are located in rural and other underserved areas and run as "real" delivery systems, providing care to thousands of patients. The latter strategy assumes that the clinics have adequate reimbursement rates or other subsidies to breakeven.

The practice location decision of graduates depends on their demographic characteristics, the school's curriculum and faculty, Medicaid fees, FQHC dentist compensation rates and competing opportunities for providing care to full pay patients. There is a substantial body of knowledge on these different determinants of practice location. More specifically, to have an impact on access to care, there must be sufficient numbers of dental applicants from the state with competitive GPAs and DAT scores. Further, a significant number of these Wisconsin applicants need to come from underrepresented minority groups or from underserved areas of the state, if they are likely to practice in underserved locations.

Dental schools can also impact access by the design of their clinical education programs for residents and students. Traditionally, dental schools run their clinical training program in centralized school-owned clinics that are organized as teaching laboratories. These clinics provide little care, students received limited clinical experience, and they require large capital and operating subsidies.

The primary alternative is to partner with community clinics and practices and have students and residents spend a substantial amount of time in these patient-centered facilities. In contrast to dental school clinics, supervising dentists continue to provide care to patients, while supervising students. Substantial evidence suggests that students and residents are more productive in these community settings, and they make a net positive contribution to reducing access disparities.

Any clinical education model proposed by the Marshfield Clinic will be assessed in terms of these factors. We will determine the capital required to build the school, the operating subsidies needed to support clinical training programs, and the school's impact on access to care in rural communities.

In addition to assessing the educational model, we will meet with the senior leadership team at the Marshfield Clinic to determine their capacity and commitment to running a dental school. This includes an assessment of

- current medical education programs and the Clinics ability to raise the capital and operating subsidies needed for a new school.
- 4. Other Educational Options We will review other educational options to increase the number of dental graduates in rural and other underserved areas of the state. For example, Marquette School of Dentistry may be interested and have the capacity to increase the number of enrolled students. Another educational option may be the development of a dental school in conjunction with one of the medical schools in the state.
- 5. Non-Educational Options Previously discussed in general terms (see #2), we will assess the feasibility of several non-educational options for increasing access in rural areas. For example, what impact would Medicaid/CHIP fee increases have on utilization rates in rural areas and on aggregate state Medicaid funding? We will also assess the potential impact of pending national health reform legislation that may change the percentage of Medicaid/CHP funds that come from CMS. As another example, we have considerable experience with school-based delivery systems for low-income children built around a dental hygiene team using portable equipment to provide screening and preventive services. Children needing restorative care are seen by dentists in the schools also using portable equipment or referred to community clinics or practices. Also we will examine the impact of expanded duty dental auxiliaries on access disparities? We recently completed a study of the use of EFDAs by general dentists in Colorado. These examples provide the general approach that we will use to examine the impact of non-education options on access to care.
- 6. Mid-Level-Providers Many developed countries allow MLPs to provide basic primary (irreversible) services to children and sometimes adults. One type of MLP is a dental health therapist (DHATS); they are now operating in frontier tribal areas of Alaska, and recently, Minnesota legalized DHATs and established DHAT training programs. Several other states (e.g., Maine, Washington, Connecticut) are likely to pass similar legislation in the next few years. While the data on DHATs is limited, we will make projections on their impact on access to care in rural communities. This analysis will focus on their role in providing dental care to children and will take into account the mix of services that low-income children receive in private practices and community clinics.
- 7. Medical and Dental Service Integration Most rural communities have better access to primary medical care than dental care. The question is, are there opportunities for physician practices to provide some diagnostic, preventive, and treatment dental services to patients that do not have access to dentists? A few states reimburse physicians (Medicaid/CHIP program) for providing diagnostic and preventive dental services to young children. Other options that have been discussed include allowing physicians to employ dental

hygienists and other types of MLPs and training primary care medical residents to extract teeth.

- 8. <u>Additional Studies</u> When this project is close to completion, we will identify any major gaps in information and knowledge that the State may want to address in future studies.
- 9. <u>Findings and Recommendations</u> We will compare the advantages and disadvantages of a new school of dentistry at the Marshfield clinic versus other options (educational and non-educational), with respect to their probable impact on access to care in rural communities and on state budgets (education and health care). In this context we will identify the most politically, economically, and managerially feasible option that has the largest impact on reducing access disparities in rural counties.

## III. Work Plan/Timeline

The proposed project will take 2.5 months to complete. This is a very constrained time frame and will require the full commitment of the entire research team. A detailed work plan is presented.

Work Plan							
	Objective	Personnel Responsible	Expected Completion Date	Deliverable			
1.	Define Rural Access Problem	Bailit Brown Clemens Myne-Joslin	1/30/10	Assess difference in utilization rates - privately Vs. Medicaid insured			
2.	Review state strategies to reduce access disparities	Bailit McGowan Stover	2/15/10	Describe methods other states have used to reduce dental access disparities			
3.	Obtain data on proposed dental school	Bailit Brown Clemens Tomlinson	1/15/10	Describe and assess Marshfield Clinic dental school model			

4.	Collect data on Marshfield clinic capacity to run dental school	Bailit Stover Tomlinson	1/15/10	Describe current educational programs and assess resources available to new school
5.	Examine other options for dental school design	Bailit Brown Tomlinson	2/1/10	Determine cost- effectiveness of different dental school models at Marshfield Clinic
6.	Determine capacity safety net system/private practices for students/residents rotations	Stover Clemens Bailit Myne-Joslin	2/15/10	Estimate number senior students and residents that can be trained in safety net system and private practices
7.	Determine availability of competitive Wisconsin applicants	Bailit Stover McGowan	2/15/10	Estimate competitive (GPAs) applications school likely to receive from Wisconsin students from rural and underserved areas
8.	Examine other options to increase dental graduates	Bailit Brown McGowan Clemens	2/28/10	Estimate potential for other Wisconsin dental and medical schools to graduate more dentists
9.	Review non- educational options to reduce rural access disparities	Bailit Brown Clemens Stover	3/1/09	Estimate cost- effectiveness of non- education strategies to reduce rural access disparities
10.	Consider the impact of Mid-Level-Providers on access	Brown Myne-Joslin	3/15/10	Estimate the feasibility and cost-effectiveness of using MLP to reduce disparities within 10 years

11.	Examine options for integrating medical and dental services in rural areas	Bailit  DeVitto  Stover	3/1/10	Estimate the impact of different models of medical/dental integration on rural access to care
12.	Identify the need for additional studies	Bailit Brown Stover	3/15/10	Consider other studies needed to improve access to care in rural areas
13.	Prepare final report	Bailit and Team	3/15/10	Summarize the major findings and present recommendations

## IV. Cost Estimate

The estimated cost for the proposed 2.5 month project is \$159,000. Detailed cost proposal submitted as a separate and sealed document labeled **Cost Proposal**.

# V. Required Materials

# A. Proprietary Information

No proprietary data or methods will be used in the proposed study

**B.** Vendor Information (Document DOA-3477 Attached)

# VI. Appendix

- A. Key Staff Bio-sketches/Resumes
- B. Letters of Endorsement None
- C. Relevant Materials None